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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,543	06/28/2001	Takaharu Kawahara	210349US0	5132

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EXAMINER	
REDDICK, MARIE L	

ART UNIT	PAPER NUMBER
1713	20

DATE MAILED: 12/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/892,543	KAWAHARA ET AL.	
	Examiner	Art Unit	
	Judy M. Reddick	1713	

-- The MAILING DATE of this communication appears on th cov r sheet with th correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) *19 and 20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-20* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/30/03 has been entered.

Election/Restrictions

2. Newly submitted claim 20 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The method for producing an ethylene-vinyl acetate copolymer per the originally claimed invention(claims 1-3, 8, 10, 12, 14 and 16) is substantially different from the method for producing an ethylene-vinyl acetate copolymer per newly presented claim 20, the two being mutually exclusive species, each not requiring the particulars of the other for patentability.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 20, along with claim 19, has been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recited "wherein said alcohol-based solvent is deoxidized in advance" per claim 1 and 4 as per the metes and bounds of such engender indeterminacy in scope, i.e., it is not readily ascertainable as to the stage the oxygen content reduction of the alcohol-based solvent takes place, i.e., in advance of the copolymerization, in advance of the solution being introduced into a recovery column or else.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Blumberg et al(U.S. 3,513,142).

Blumberg et al disclose a method for producing a polyvinyl alcohol product of improved color wherein a vinyl ester of a 2 to 4 carbon aliphatic monocarboxylic acid, or a mixture thereof with a copolymerizable monomer, is polymerized continuously in a polymerizing zone fed by a non-aqueous stream of the vinyl ester monomer or such mixture (or a solution thereof in a solvent such as a 1-4 carbon aliphatic alcohol), which stream has been purged with an inert gas such as nitrogen to remove dissolved oxygen therefrom, and the resulting polymer is alcoholyzed to obtain a polyvinyl alcohol product of improved color and wherein purging of the monomer feed stream with the inert gas reduces the dissolved oxygen content to not more than

about 30 ppm and preferably to not more than about 10 ppm. Polyvinyl alcohols are produced in accordance with the invention by a process wherein dissolved oxygen is continuously removed from a non-aqueous stream of a monomeric vinyl ester of a 2 to 4 carbon aliphatic monocarboxylic acid, or a mixture thereof with a monomer of the group consisting of: (a) the acrylate and methacrylate esters of 1 to 4 carbon aliphatic alcohols; (b) acrylic and methacrylic acids; (c) N-vinyl pyrrolidone; and (d) 2 to 20 carbon alpha-olefins,viz., ethylene, or a solution of such ester or such mixture thereof in a solvent which is inert towards the polymerization initiator to be used, by purging said stream with an inert gas. The purged stream is continuously fed to a polymerization zone wherein part of the monomer or monomers is polymerized in the presence of a free radical polymerization initiator. A stream comprising unpolymerized monomer(s)and the resulting polymer is continuously withdrawn from the polymerization zone and the unpolymerized monomer(s)are separated from the polymer component of the withdrawn stream, which polymer component is then alcoholyzed with methanol or ethanol in the presence of an acidic or an alkaline catalyst to obtain a polyvinyl alcohol product of improved color. Generally, the amount of the comonomer employed with the vinyl ester monomer to produce such copolymers will be limited so as to yield a copolymer containing not more than about 6% of the comonomer. The aforementioned copolymers can be readily alcoholyzed by conventional alcoholysis. See the Abstract, cols. 3-8, the Runs and claims of Blumberg et al. Blumberg et al therefore anticipate the instantly claimed invention with the understanding that the process parameters of Blumberg et al overlap in scope with the claimed process parameters.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blumberg et al(U.S. 3,513,142).

The disclosure of Blumberg et al for what it teaches and as applied to claims 1-15 as stated in the rejection supra. Further, the disclosure of Blumberg et al differs basically from the claimed invention as per the absence of an embodiment directed to the specifically defined (saponified)ethylene-vinyl acetate copolymer, in terms of ethylene content and melt index. However, Blumberg et al teach that the amount of comonomer employed with the vinyl ester, viz., vinyl acetate, is generally not more than about 6 wt.% of comonomer, which is a necessary implication that ethylene amounts in excess of "about 6 % by weight, including the claimed content of ethylene, are contemplated and would have been operable with the scope of patentees invention and with a reasonable expectation of success, "generally" being relative and not absolute. Moreover, the use of any comm rcially available ethylene-vinyl acetate copolymer in lieu of the vinyl acetate copolymer(s)of Blumberg et al would have been obvious to

one of ordinary skill in the art and with a reasonable expectation of success. Criticality for such, clearly commensurate in scope with the claims, not have been demonstrated on this record.

Response to Arguments

12. Applicant's arguments filed 10/30/03 have been fully considered but they are not persuasive.

Relative to Blumberg et al---- The crux of Counsel's arguments appears to hinge on the stage at which deoxidation of the alcohol-based solvent occurs, i.e., Counsel, throughout the REMARKS, argues that Blumberg et al fail to disclose or suggest that an oxygen concentration in said alcohol-based solvent is not more than 60ppm when said alcohol-based solvent is used in recovering said unreacted vinyl acetate which would necessary translate to deoxidizing after "copolymerization" but in advance of "a recovery column introduction of solution of ethylene-vinyl acetate copolymer". The bottom line is that the stage at which deoxidizing of the alcohol-based solvent takes place is not limited to that for which Counsel argues and consequently, the process of Blumberg et al which includes deoxidizing in advance of copolymerization does anticipate the claimed method. Counsel is arguing criticality for something not even in the claims. Moreover, from all indications, the deoxidizing of the alcohol-based solvent appears to have taken place in advance of copolymerization in Runs 1 and 2.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judy M. Reddick whose telephone number is (703)308-4346. The examiner can normally be reached on Monday-Friday, 6:30 a.m.-3:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (703)308-2450. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-8183.

Judy M. Reddick
Primary Examiner
Art Unit 1713

JMR
11.25.03